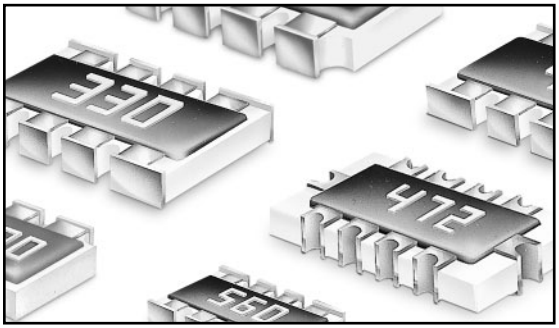
查询BCN102ABI1.2KF7供应商

MODEL BCN SERIES

Thick Film

Chip Resistor Arrays



MODEL STYLES

Model (Width)	# of Resistors	Circuit	Industry Size	Edge Finish / Termination: Scalloped Convex	Square Convex	Square Concave
Model BCN 102 (1.0mm)	2	Isolated	0404		•	
Model BCN 104 (1.0mm)	4	Isolated	0804		•	
Model BCN 16 4ABI (1.6mm)	4	Isolated	1206			•
Model BCN 16 4A/AB (1.6mm)	4	Isolated	1206	•	•	
Model BCN 16 8RB/8SB (1.6mm)	8	Bussed	1206		•	
Model BCN 21 (2.1mm)	8	Bussed	1608			•
Model BCN 4D (3.1mm)	4	Isolated	2112	•		
Model BCN 4DBI (3.1mm)	4	Isolated	2112			•
Model BCN 31 8RB/8SB (3.1mm)	8	Bussed	2512		•	
Model BCN 31 8RBI/8SBI (3.1mm)	8	Bussed	2512			•
Jumper Chip Array	4/8	Isolated/Bussed	1206/2512	•	•	•
	2/4	Isolated	0404/0804		•	

4

FEATURES

- Reliable monolithic construction
- Nickel barrier terminations
- Top side marking for easy identification
- Concave or convex termination styles
- Square or scalloped edges available

BENEFITS

- Saves board space over equivalent rated chip resistors
- Eliminates up to seven pick & place operations
- Single component reliability
- Leadless chip, reduced inductance
- Mounts close to active devices

APPLICATIONS

- Pull up/pull down resistors for digital IC's
- Series termination on high speed data busses
- Current limit for LED displays

Specifications subject to change without notice.

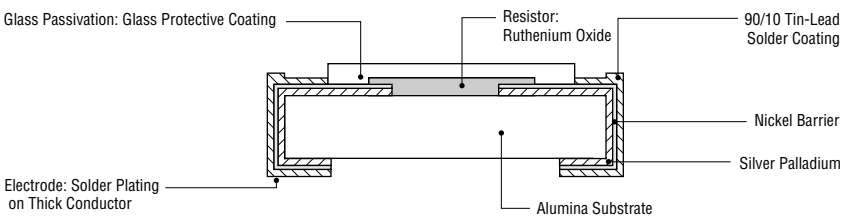
ELECTRICAL

Standard Resistance Range, Ohms	**BCN 4D, BCN 10, BCN16 4:**	10 to 1 Megohm
	BCN 16 8R/8S:	100 to 1 Megohm
	BCN 31 8R/8S:	22 to 1 Megohm
	BCN 21:	68 to 220K
Standard Resistance Tolerance		±5% (J. Tol.)
		Optional: ±1% (F Tol.), BCN 4D, BCN 16 4, BCN 318RB/8SB Only
		±2% (G Tol.), BCN 16 4, BCN 31 8RB/8RS Only
Operating Voltage, Maximum	**BCN16 4, BCN 31 8R/8S:**	50Vdc or √pr
	BCN 102, BCN 104, BCN 16 8R/8S, BCN 21:	25Vdc or √pr
	BCN 4D:	75Vdc or √pr
Power Rating, Watts at 70°C	**BCN 102:**	63mW per Resistor / 125mW per Package
	BCN 4D:	125mW per Resistor / 500mW per Package
	BCN 104:	63mW per Resistor / 125mW per Package
	BCN 16 4A:	63mW per Resistor / 250mW per Package
	BCN 16 8R/8S:	32mW per Resistor / 250mW per Package
	BCN 21, BCN 31 8R/8S:	63mW per Resistor / 500mW per Package

ENVIRONMENTAL

Operating Temperature Range		-55°C to +125°C
Temperature Coefficient of Resistance	**BCN 4D, BCN 16 8R/8S, BCN 21, BCN 31:**	±200ppm/°C
	BCN 102, BCN 104, BCN 16 4:	±250ppm/°C
Moisture Resistance		1,000 hours at +40°C, 95% R.H. (3.0%+0.1Ω ΔR)
High Temperature Operation		1,000 hours at 70°C (3.0%+0.1Ω ΔR)
Short Time Overload		2.5 x rated voltage, 5 seconds (2.0%+0.1Ω ΔR)
Temperature Cycling		-55°C to +125°C, 5 cycles (1.0%+0.1Ω ΔR)
Resistance to Solder Heat		260°C for 10 seconds (1.0%+0.1Ω ΔR)
Load Life		1,000 hours at 70°C (3.0%±0.1Ω ΔR)

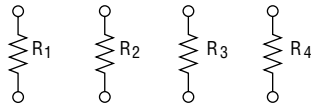
CONSTRUCTION



SCHEMATICS

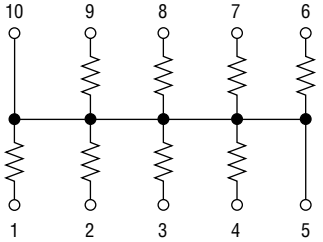
BCN 4D, BCN 104, & BCN 16 4

BCN 102

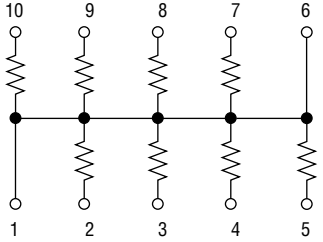


$R_1 = R_2 \ldots Rn$
(n = 2,4)

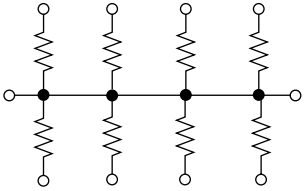
BCN 16 8R & BCN 31 8R



BCN 16 8S & BCN 31 8S



BCN 21



STANDARD RESISTANCE VALUES, OHMS

Model BCN 102, BCN 4D, BCN 104 & BCN 16 4

10	100	1K	10K	100K	1Meg
12	120	1.2K	12K	120K	Jumper
15	150	1.5K	15K	150K	
18	180	1.8K	18K	180K	
22	220	2.2K	22K	220K	
27	270	2.7K	27K	270K	
33	330	3.3K	33K	330K	
39	390	3.9K	39K	390K	
47	470	4.7K	47K	470K	
56	560	5.6K	56K	560K	
68	680	6.8K	68K	680K	
82	820	8.2K	82K	820K	

Model BCN 16 8R & BCN 16 8S

220	1K	10K	100K
330	4.7K	47K	1Meg

Model BCN 31 8R		**Model BCN 31 8S**	
220	**2.2K**	**10K**	**100K**
330	**2.7K**	**22K**	**470K**
1K	**4.7K**	**47K**	**1Meg**

Model BCN 21

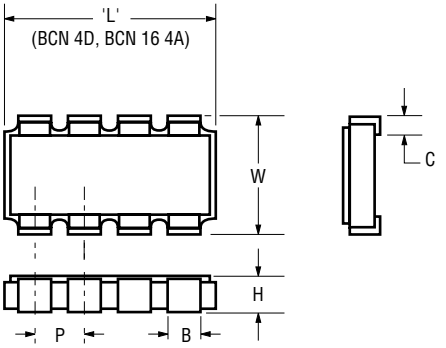
68	330	4.7K	10K
220	1K	47K	100K

4

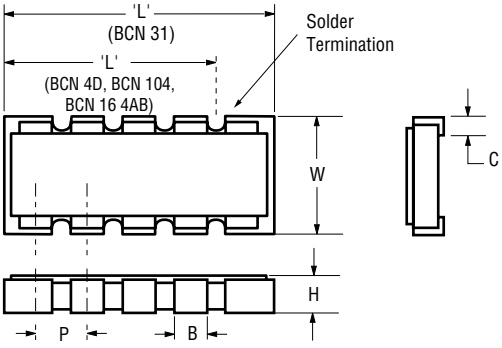
OUTLINE DIMENSIONS (Inch/mm)

Exterior Termination (Convex)

Scalloped Edge: Models BCN 4D, BCN 16 4A



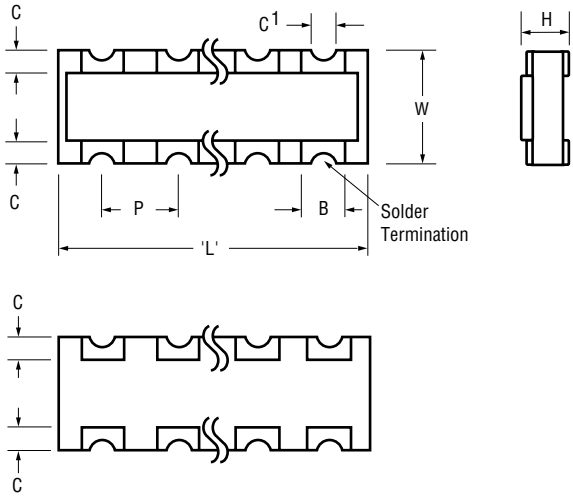
Square Edge: Models BCN 4D, BCN 104, BCN 16 4AB, BCN 31



	L	W	H	P	B	C
BCN 4D	.210±.008 5.34±0.20	.122±.008 3.10±0.20	.022±.004 0.55±0.10	.050±.008 1.27±0.20	.030±.008 0.80±0.20	.012±.008 0.30±0.20
BCN 104	.079±.008 2.00±0.20	.039±.006 1.00±0.15	.014±.004 0.35±0.10	.020±.006 0.50±0.15	.012±.006 0.30±0.15	.010±.004 0.25±0.10
BCN 16 4A & AB	.126±.004 3.2±0.10	.063±.004 1.60±0.10	.020±.004 0.50±0.10	.031±.002 0.80±0.05	.020±.004 0.50±0.10	.009±.005 0.229±0.127
BCN 31	.252±.004 6.40±0.20	.122±.004 3.10±0.20	.022±.004 0.55±0.10	.050±.002 1.27±0.051	.032±.004 0.80±0.10	.012±.004 0.30±0.10

Interior Termination (Concave)

Square Edge: Models BCN 4 DBI, BCN 16 4ABI, BCN 31

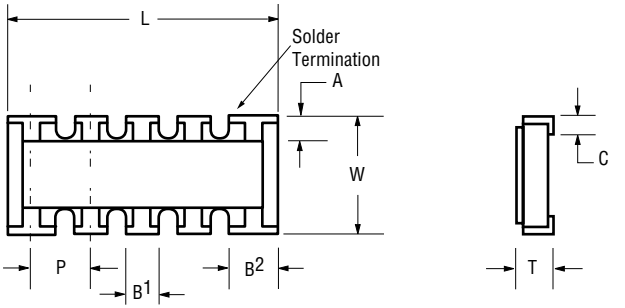


	L	W	H	P	B	C	C1
BCN 4 DBI	.210±.008 5.34±0.20	.122±.008 3.10±0.20	.022±.004 0.55±0.10	.050±.008 1.27±0.20	.030±.008 0.80±0.20	.012±.008 0.30±0.20	
BCN 16 4ABI	.126±.008 3.20±0.20	.063±.006 1.60±0.15	.024±.004 0.60±0.10	.031±.004 0.8±0.10	.016±.006 0.40±0.15	.012±.008 0.30±0.20	.012±.008 0.30±0.20
BCN 31	.252±.008 6.40±0.20	.122±.008 3.10±0.20	.024±.004 0.6±0.10	.050 1.27	.028±.008 0.70±0.20	.012 0.30	.012 +.008 -.004 0.30 +.02 -.01

OUTLINE DIMENSIONS (Inch/mm)

Exterior Termination (Convex)

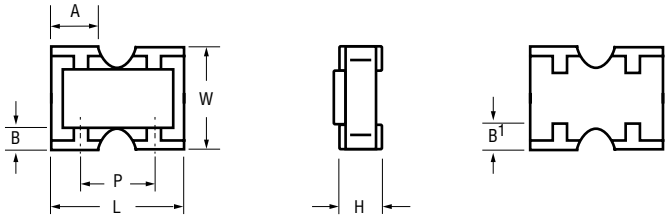
Square Edge: Model BCN 16 8R, BCN 16 8S



L	W	T	A	B^1	B^2	C	P
.126±.008 3.2±0.20	.063±.008 1.60±0.20	.020±.004 0.50±0.10	.012±.006 0.30±0.15	.014±.006 0.36±0.15	.020±.006 0.50±0.15	.008 0.2	.025 0.64

Exterior Termination (Convex)

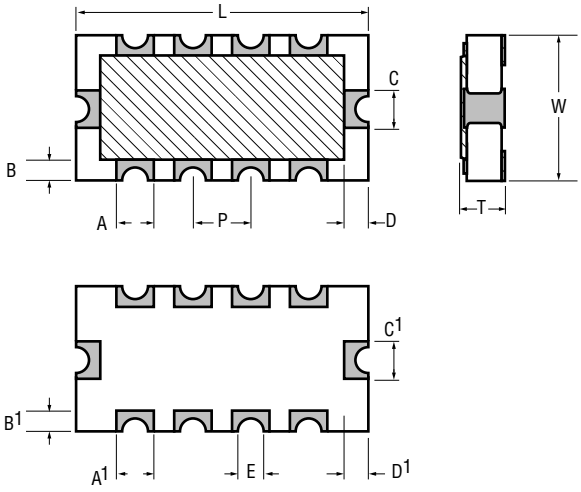
Square Edge: Model BCN 102



	L	W	H	A	B	B^1	P
BCN 102	.039±.004 1.00±0.10	.039±.004 1.00±0.10	.014±.002 0.35±0.05	.013±.002 .33±0.05	.006 0.15	.010±.002 0.25±0.05	.026 0.65

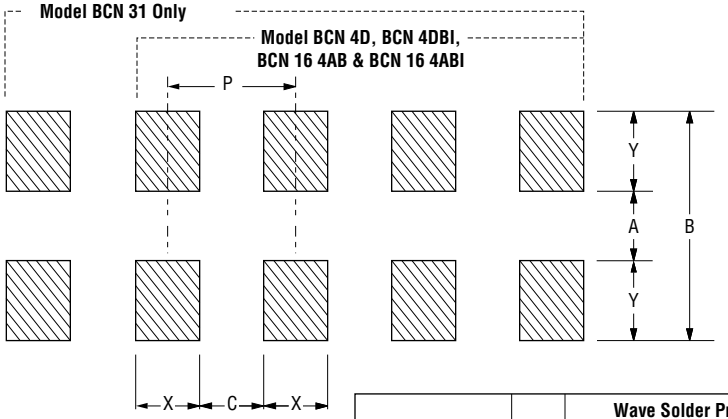
Interior Termination (Concave)

Square Edge: Model BCN 21



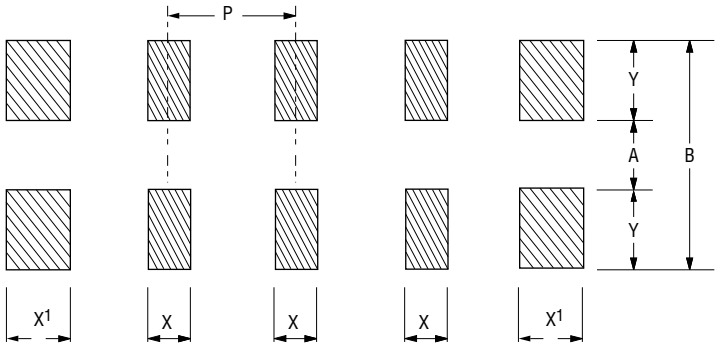
L	W	T	A	B	C	D
.157±.008 4.00±0.20	.083±.008 2.10±0.20	.024±.004 0.60±0.10	.020±.008 0.50±0.20	010±.008 0.25±0.20	.020±.008 0.50±0.20	.012±.008 0.30±0.20
A^1	**B^1**	**C^1**	**D^1**	**E**	**P**	
.016±.008 0.40±0.20	.016±.008 0.40±0.20	.020±.008 0.50±0.20	.014±.008 0.35±0.20	.012 Typ. 0.30 Typ.	.031 Typ. 0.80 Typ.	

SOLDER PAD LAYOUT (Inch/mm)



	P	Wave Solder Process					Re-Flow Solder Process				
		A	B	C	X	Y	A	B	C	X	Y
BCN 4D/4DBI	.050 1.27	.087 2.20	.169 4.30	.022 0.57	.028 0.70	.041 1.05	.087 2.20	.154 3.90	.022 0.57	.028 0.70	.034 0.85
BCN16 4A/AB/ABI	.032 0.80	.039 1.00	.118 3.00	.014 0.35	.018 0.45	.039 1.00	.039 1.00	.118 3.00	.014 0.35	.018 0.45	.039 1.00
BCN 31 8R/8S	.050 1.27	.084 2.10	.148 3.70	.014 0.35	.036 0.90	.032 0.80	.084 2.10	.148 3.70	.014 0.35	.036 0.90	.032 0.80

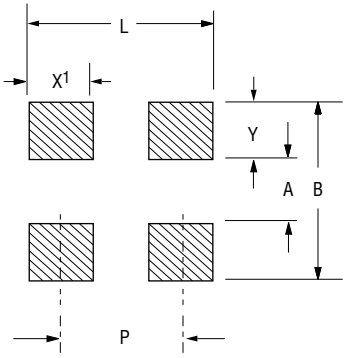
Model BCN 16 8RB & BCN 16 8SB



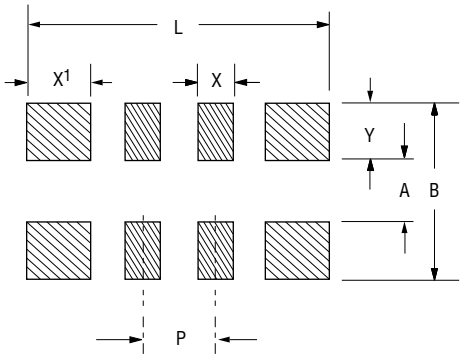
	P	Wave Solder Process					Re-Flow Solder Process				
		A	B	X	X1	Y	A	B	X	X1	Y
BCN 16 8RB/8SB	.025 0.64	.048 1.20	.096 2.40	.012 0.30	.018 0.45	.024 0.60	.048 1.20	.096 2.40	.012 0.30	.018 0.45	.024 0.60

SOLDER PAD LAYOUT (Inch/mm)

Model BCN 102

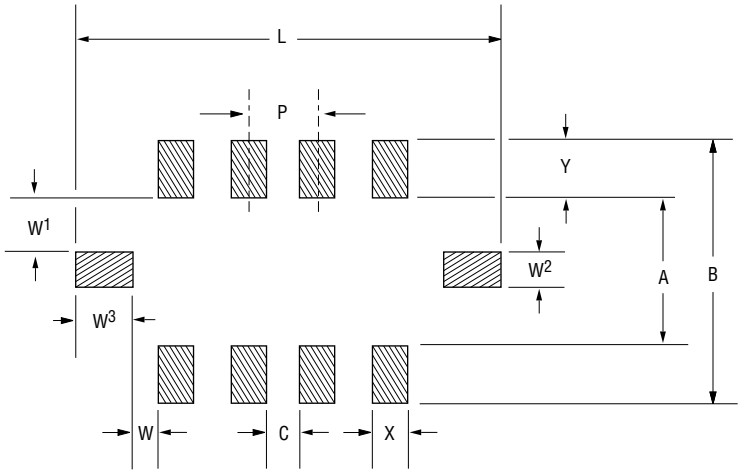


Model BCN 104



	P	A	B	X	X1	Y	L
BCN 102	.026 0.65	.020 0.50	.059 1.50	NA	.018 0.45	.020 0.50	.044 1.10
BCN 104	.020 0.50	.020 0.50	.059 1.50	.010 0.25	.018 0.45	.020 0.50	.085 2.15

Model BCN 21



	P	A	B	C	X	Y	W	W1	W2	W3	L
BCN 21	.031 0.80	.059 1.50	.118 3.00	.016 0.40	.016 0.40	.030 0.75	.012 0.30	.020 0.50	.020 0.50	.030 0.75	.193 4.90

ORDERING INFORMATION

BCN 4 D B I 102 J 7

- Model Series
- No. of Resistors:
  BCN 4D = 4 Resistors
- Circuit Configuration:
  D = Isolated
- Edge Option (B = Square Edge):
  BCN 4DBI: Square Edge
  BCN 4D: Scalloped Edge - No Code Used
- Termination Code:
  I = Interior (Concave) Termination
  (Only Available in BCN 4 DBI)
- Resistance Code
- Tolerance: ± 5%
- Packaging Option:
  (See Table A)

See 'Model Styles' for Available Options

BCN 16 4 A B I 102 J 7

- Model Series
- Width:
  10 = 1.0mm
  16 = 1.6mm
  21 = 2.1mm
  31 = 3.1mm
- No. of Resistors:
  BCN 102 = 2 Resistors
  BCN 104 = 4 Resistors
  BCN 16 4A = 4 Resistors
  BCN 16 8R or 8S = 8 Resistors
  BCN 21 = 8 Resistors
  BCN 31 8R or 8S = 8 Resistors
- Circuit Configuration:
  A = Isolated (BCN 10, BCN 16 4A)
  Bussed (reversed)
  R = (BCN 16 8R or BCN 31 8R)
  Bussed (standard)
  S = (BCN 16 8S or BCN 21 or BCN 31 8S)
- Edge Option (B = Square Edge):
  Scalloped Edge - No Code Used (Standard)
  Square Edge **Only** - Use Code 'B'
- Termination Code:
  I = Interior (concave) Termination
  No Code Used for Exterior Termination (Standard)
  All Interior Termination Requires 'B' for Square Edge
  (BCN 16 4ABI, BCN 21 8SBI, BCN 31 8RBI, BCN 31 8SBI)
- Resistance Code:
  3 Digits for E6, E12, E24 Series, All Tolerances
  4 Digits for E96 Series, 1% Tolerance
- Tolerance:
  F = ± 1% (BCN 4D, BCN 16 4, BCN 31 8RB/8SB Only)
  G = ± 2% (BCN 16 4, BCN 31 8RB/8SB Only)
  J = ± 5% (Standard)
  (Use JP for Jumper Chip Array - BCN 10, BCN 16 4, BCN 31)
- Packaging Option:
  (See Table A)

Table A	7" Reel Diameter		13" Reel Diameter	
	Paper	Embossed	Paper	Embossed
BCN 10 2	10K		40K	
BCN 4D		4K		16K
BCN 10 4	10K		40K	
BCN 16 4	5K		20K	
BCN 16 8	5K		20K	
BCN 21		4K		16K
BCN 31		4K		16K

See 'Model Styles' for Available Options.

Note: Tape & Reel Dimensions per EIA-481.